

In the Claims

1. (currently amended) A method for performing device address assigning functionality in ~~intelligent hardware~~ an intelligent data concentrator, said method comprising:

receiving a network access request from ~~an electronic~~ a client device communicatively coupled to said intelligent ~~hardware~~ data concentrator;

transmitting a device address request to ~~a network~~ an Ethernet local area network (LAN) server communicatively coupled to said intelligent ~~hardware~~ data concentrator;

receiving a first device address from said ~~network~~ Ethernet LAN server communicatively coupled to said intelligent ~~hardware~~ data concentrator; and

assigning a second device address to said ~~electronic~~ client device communicatively coupled to said intelligent ~~hardware~~ data concentrator;

wherein said intelligent ~~hardware~~ data concentrator is ~~wall-mountable~~ configured to be mounted internally within a wall such that and ~~comprises a user-accessible surface such that a user is provided~~ of the intelligent data concentrator is external to and substantially planar with an exterior surface of the wall to provide direct access to said intelligent ~~hardware~~ data concentrator.

2. (currently amended) A method as recited in Claim 1 wherein said intelligent hardware comprises:

a first interface for communicatively coupling said intelligent hardware to a network, said network comprising said Ethernet LAN ~~network~~ server;

a second interface for communicatively coupling said intelligent hardware to a plurality of said ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said Ethernet LAN network;

a processor coupled to said first interface and said second interface;
and

a device address retriever coupled to said processor.

3. (currently amended) A method as recited in Claim 1 wherein said first device address and said second device address are ~~an~~ IP addresses.

4. (original) A method as recited in Claim 1 wherein said Ethernet LAN network server comprises a DHCP server.

5. (original) A method as recited in Claim 1 wherein said first device address is the same as said second device address.

6. (original) A method as recited in Claim 1 wherein said first device address is a global device address.

7. (original) A method as recited in Claim 1 wherein said second device address is a private device address.

8. (currently amended) A method for performing device address assigning functionality in ~~intelligent hardware~~ an intelligent data concentrator, said method comprising:

receiving a network access request from ~~an electronic~~ a client device communicatively coupled to said intelligent hardware, said intelligent ~~hardware~~ data concentrator having a first device address, wherein said intelligent ~~hardware~~ data concentrator is ~~wall-mountable~~ configured to be mounted internally within a wall such that ~~and comprises~~ a user-accessible surface ~~such that a user is provided~~ of the intelligent data concentrator is external to and substantially planar with an exterior surface of the wall to provide direct access to said intelligent ~~hardware~~ data concentrator.; and assigning a second device address to said ~~electronic~~ client device communicatively coupled to said intelligent ~~hardware~~ data concentrator, such that said intelligent ~~hardware~~ data concentrator eliminates the need for a separate device address assigning server.

9. (currently amended) A method as recited in Claim 8 wherein said intelligent ~~hardware~~ data concentrator comprises:

a first interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);

a second interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to a plurality of said ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said Ethernet LAN ~~network~~;

a processor coupled to said first interface and said second interface;
and

a device address assignor coupled to said processor.

10. (original) A method as recited in Claim 8 wherein said first device address and said second device address are IP addresses.
11. (original) A method as recited in Claim 9 wherein said device address assignor is a DHCP server.
12. (original) A method as recited in Claim 8 wherein said first device address is the same as said second device address.
13. (original) A method as recited in Claim 8 wherein said first device address is a global device address.
14. (original) A method as recited in Claim 8 wherein said second device address is a private device address.
15. (currently amended) An intelligent ~~device~~ data concentrator for performing device address assigning functionality comprising:
- a ~~wall-mountable~~ housing configured to be installed internally within a wall;
 - a first interface for communicatively coupling said intelligent ~~device~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);
 - a second interface for communicatively coupling said intelligent ~~device~~ data concentrator to a plurality of ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said Ethernet LAN network, wherein said second interface ~~is comprised within a user-accessible surface~~ is external to and substantially planar with an external surface of the wall to provide a ~~such that a user is provided direct~~

~~access to said intelligent hardware~~ plurality of communication ports, each communication port providing the communicative coupling for one of the plurality of client devices;

a processor coupled to said first interface and said second interface;
and

a device address retriever coupled to said processor for retrieving a first device address for said intelligent ~~device~~ data concentrator from a network server of said Ethernet LAN network and for assigning a second device address to said ~~electronic~~ client device;

wherein said first interface, said second interface, said processor and said device address retriever are comprised within said ~~wall-mountable~~ housing.

16. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address and said second device address are IP addresses.

17. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said network server is a DHCP server.

18. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address is the same as said second device address.

19. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address is a global device address.

20. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said second device address is a private device address.

21. (currently amended) An intelligent ~~device~~ data concentrator for performing device address assigning functionality, said intelligent ~~device~~ data concentrator having a first device address, said intelligent ~~device~~ data concentrator comprising:

a ~~wall-mountable~~ housing configured to be installed internally within a wall;

a first interface for communicatively coupling said intelligent ~~device~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);

a second interface for communicatively coupling said intelligent ~~device~~ data concentrator to a plurality of ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said network, wherein said second interface ~~is comprised within a user-accessible surface~~ is external to and substantially planar with an external surface of the wall to provide a such that a user is provided direct access to said intelligent hardware plurality of communication ports, each communication port providing the communicative coupling for one of the plurality of client devices;

a processor coupled to said first interface and said second interface;
and

a device address assignor coupled to said processor for assigning a second device address to said ~~electronic~~ client device;

wherein said first interface, said second interface, said processor and said device address assignor are comprised within said ~~wall-mountable~~ housing.

22. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address and said second device address are IP addresses.

23. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said device address assignor is a DHCP server.

24. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address is the same as said second device address.

25. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address is a global device address.

26. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said second device address is a private device address.